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AMSAT NEWS SERVICE
ANS-085

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The AMSAT News Service bulletins are a free, weekly news and information service of AMSAT, The Radio Amateur Satellite Corporation. ANS publishes news related to Amateur Radio in Space including reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

The news feed on http://www.amsat.org publishes news of Amateur Radio in Space as soon as our volunteers can post it.

Please send any amateur satellite news or reports to: ans-editor [at] amsat.org

You can sign up for free e-mail delivery of the AMSAT News Service Bulletins via the ANS List; to join this list see: https://mailman.amsat.org/postorius/lists/ans.amsat.org/

ANS-085 AMSAT News Service Weekly Bulletins

To: All RADIO AMATEURS
From: Radio Amateur Satellite Corporation
712 H Street NE, Suite 1653
Washington, DC 20002

DATE 2023 Mar 26

AMSAT at Dayton Hamvention - Call for Volunteers repeated from last week.

It's less than eight weeks away when Amateur Radio's biggest event of the year happens at the Greene County Fairgrounds in Xenia, Ohio. That's right, May 19-20 is Hamvention time when over 30,000 of our closest friends get together to get a first hand look at the latest products and to catch up with friends from around the world.

With over 1,200 square feet of exhibit space, AMSAT is a major Hamvention exhibitor with displays from Engineering, Operations, Educational Relations, the AMSAT Store and much more. Last year in 2022, about 35 people assisted with the AMSAT booth. It was the efforts of those volunteers that made the 2022 Dayton Hamvention a success for AMSAT. The interaction with AMSAT members, satellite operators, designers, and builders makes the whole experience a lot of fun.

Would you consider helping AMSAT at the Hamvention this year? Whether

you're available for only a couple of hours or if you can spend the entire weekend with us, your help would be greatly appreciated.

If you will be attending Hamvention and can help, please send an e-mail to Phil Smith, W1EME, AMSAT Hamvention Coordinator via w1eme [at] amsat [dot]org.

[ANS thanks Phil Smith, W1EME, AMSAT Hamvention Coordinator for the above information.]

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Radio operation in the 23 cm band (1240-1300 MHz) to protect to protect ground-based receivers for the Galileo RNSS satellite constellation.

Advice from Austria's national amateur radio society ÖVSV cites changes to the legal conditions in the AFU area from 03/13/2023:
Annex 2 of the Amateur Radio Ordinance is omitted and is now regulated in the Frequency Use Ordinance Annex 4. This results in some changes in the frequency ranges and powers.
For the KW bands 80m, 40m, 20m, 17m, 15m, 12m and 10m, 1KW (High-Power) can now be approved for Class 1 FA after 1 year of trouble-free operation.
    Thus, the power limitation of 7100-7200 kHz (previously only 200W) in the 40m band is eliminated and AFU has primary status.
    30m band still only max. 200W if power level B or C approved (no change)
    160m band from 1810-1850 kHz now max. 200W if power level B or C approved and AFU has primary status.
    160m band from 1850-2000 kHz only max. 100W (now instead of 1950 kHz up to 2000 kHz)

2023-03-13 Austrian Regulations
    The 6m band has been extended from 52-54MHz. (Limited until 31.12.2030, for research WRAN)
-from 50-52 MHz now max 200W if power level B or C approved and AFU has primary status.
-from 52-54MHz only max 100W.
    On the 70cm band now also allowed as already on 2m high-power (up to 1KW), if power level B or C approved (but only EME and MS with Yagis from at least 15dBd gain)
    The 23cm band was kept, but the performance was severely limited
    -only 10W allowed (previously max. 200W were allowed)
    -Repeaters with more than 16kHz bandwidth must cease operation by December 31, 2024.
    On all higher FM bands (except 10 GHz, since only 40dbW EIRB) now also max. 200W (previously only 100W) allowed.
    On 24GHz AFU has only secondary status

Please note the new conditions.
Kurt Baumann OE1KBC

[ANS thanks AMSAT-UK and Kurt OE1KBC for the above information]

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None

[ANS thanks Ray Hoad, WA5QGD, AMSAT Orbital Elements Manager, for the above information]

ARISS NEWS

Amateurs and others around the world may listen in on contacts between amateurs operating in schools and allowing students to interact with astronauts and cosmonauts aboard the International Space Station. The downlink frequency on which to listen is 145.800 MHz worldwide.

“Valle de Camargo” High School, Revilla de Camargo, Spain, direct via EA1FBG. The ISS callsign is presently scheduled to be OR4ISS. The downlink frequency is presently scheduled to be 145.800 MHz. The scheduled crewmember is Steve Bowen KI5BKB. The ARISS mentor is IKØUSO. Contact is go for: Mon 2023-03-27 15:09:00 UTC 36 deg.

Amur State University, Blagoveshchensk, Russia. Direct via TBD. The ISS callsign is presently scheduled to be RSØISS. The downlink frequency is presently scheduled to be 145.800 MHz. The scheduled crewmember is Andrey Fediaev. The ARISS mentor is RV3DR. Contact is go for Thu 2023-03-30 08:20 UTC

Mohammad Bin Rashid Space Centre, Dubai, UAE, direct via A68MBR. The ISS callsign is presently scheduled to be OR4ISS. The downlink frequency is presently scheduled to be 145.800 MHz. The scheduled crewmember is Sultan Al Neyadi KI5VTV. The ARISS mentor is ON6TI. Contact is go for: Fri 2023-03-31 08:49:06 UTC 72 deg

Aznakayevo, Republic of Tatarstan, Russia, direct via TBD. The ISS callsign is presently scheduled to be RSØISS. The downlink frequency is presently scheduled to be 145.800 MHz. The scheduled crewmember is Sergey Prokopyev. The ARISS mentor is RV3DR. Contact is go for Fri 2023-03-31 13:50 UTC

Stone Magnet Middle School, Melbourne, Fl, direct via AJ9N. The ISS callsign is presently scheduled to be NA1SS. The downlink frequency is presently scheduled to be 145.800 MHz. The scheduled crewmember is Steve Bowen KI5BKB. The ARISS mentor is AJ9N. Contact is go for: Fri 2023-03-31 18:07:55 UTC 50 deg

The latest information on the operation mode can be found at https://www.ariss.org/current-status-of-iss-stations.html

The latest list of frequencies in use can be found at https://www.ariss.org/contact-the-iss.html

ARISS from Twitter: We've updated our username here on Twitter to @ARISS_Intl to make us easier to find. If you are all ready following, thanks! There's nothing for you to do.

[ANS thanks Charlie Sufana, AJ9N, one of the ARISS operation team mentors for the above information]

Upcoming Satellite Operations

SAT DXPEDITION MENORCA ISLAND 2023
(DXCC : EA6 Balearic is. / GRIDS : JN10+JN20+JM19+JM29 / IOTA : EU-004)
Philippe, EA4NF will be operating on satellite from MENORCA Island as EA6/EA4NF from April 5 to 8, 223. Portable activation with a FT818ND and a

FT817ND operating in full Duplex with an Alaskan Arrow Antenna and also handheld+whip antenna. April 5-8, 2023 FM SAT & LINEARS. QSL via LoTW as EA6/EA4NF. Keep an eye on Philippe's Twitter feed for further updates : @EA4NF_SAT

CY0S, the Sable Island DXpedition, is equipped with satellite gear and will attempt satellite operations as schedule and conditions permit. Operations will be announced on https://hams.at/ Sable is mostly in grid GN03, with parts of the island in both FN93 and GN04. The expedition is set up in FN93xw, very near the GN03/FN93 grid line. (ANS thanks https://t-rexsoftware.com/cy0s/frequencies.htm for the above information)

Joe, KE9AJ will be in New Mexico Mar 26-30. Then onto DN70 in Colorado Apr 1-10. He will have his IO-117 gear with him. This will be a family trip so sat operations will be as time permits. Watch his Twitter Feed and AMSAT Upcoming Satellite Operations web page for more info as it becomes available.

The AMSAT Upcoming Satellite Operations web page may be found at: https://www.amsat.org/satellite-info/upcoming-satellite-operations/

[ANS thanks Ian Parsons, K5ZM, AMSAT rover page manager, and https://t-rexsoftware.com/cy0s/frequencies.htm for the above information]

Hamfests, Conventions, Maker Faires, and Other Events

AMSAT Ambassadors provide presentations, demonstrate communicating through amateur satellites, and host information tables at club meetings, hamfests, conventions, maker faires, and other events.

AMSAT Ambassador Clint Bradford K6LCS has a satellite presentation scheduled with a group in Thames Valley, England (5/11/23)
Think a 90-minute lively, informative, and fun "How to Work the Easy Satellites" Zoom presentation would be appropriate for your convention or club? Always included are overviews of the ARRL, AMSAT, and ARISS. And pre-presentation questions are welcome. Contact Clint Bradford, K6LCS, at https://www.work-sat.com/

Hamvention 2023 is coming! Greene County Fairgrounds and Exposition Center, May 19 - 21. AMSAT will have a full display as detailed by Phil Smith W1EME above. Please reach out to Phil if you can help.

[ANS thanks the AMSAT Events page for the above information]

Satellite Shorts From All Over

+ Doug Papay, K8DP has continued to document the GreenCube IO-117 user lists by providing a very nice mapping page using the Google My Maps application. It is well worth a browse if you are considering using the satellite or are already involved. See: https://bit.ly/3LCKmsR. [ANS thanks the Doug Papay, K8DP for the above information]

+ After 15 years in space, NASA's Aeronomy of Ice in the Mesosphere (AIM) mission has ended. NASA first noticed issues with AIM's battery in 2019, but the probe was still sending a "significant amount of data" back to Earth. NASA says AIM has now become unresponsive. Launched in 2007, AIM studied noctilucent or night-shining clouds, which can last hundreds of years in the Earth's upper atmosphere. It was only meant to operate up for two years, but it's provided data for multiple groundbreaking studies, including a study that found methane emissions are causing night-shining

clouds to form more frequently. (ANS thanks Engadget for the above information)

+ The world's first 3D-printed rocket launched successfully on Wednesday, marking a step forward for the California company behind the innovative spacecraft, though it failed to reach orbit. Billed as less costly to produce and fly, the unmanned Terran 1 rocket launched from Cape Canaveral, Florida at 11:25 pm (0325 GMT Thursday) but suffered an "anomaly" during second-stage separation as it streamed towards low Earth orbit, according to a livestream broadcast by aerospace startup Relativity Space. More may be found at https://bit.ly/3K1sSoI [ANS thanks Chris Lefkow and Lucie Aubourg of AFP, and Space Daily for the above information]

+NASA planning to spend up to $1 billion on space station deorbit module. WASHINGTON — NASA is projecting spending nearly $1 billion on a tug to deorbit the International Space Station at the end of the decade to provide redundancy for safely disposing of the station. NASA released additional details March 13 about its fiscal year 2024 budget proposal. An outline of the proposal, published by the White House March 9, requested $27.2 billion for the agency, a 7.1% increase from 2023 that roughly keeps pace with inflation. One of the biggest new initiatives in the budget is the ISS deorbit tug, which would be used to perform the final lowering of the station’s orbit to ensure it reenters over the South Pacific. NASA first indicated its plans for the tug in a request for information last August, but offered few specifics about the vehicle in the budget request. [ANS thanks Jeff Foust of Space News for the above information]

+Is it possible that SpaceX has succeeded in making orbital launches boring? Increasingly, the answer to this question appears to be yes. On Friday the California-based company launched two Falcon 9 rockets within the span of just a little more than four hours. At 12:26 pm local time, a Falcon 9 rocket carried 52 of SpaceX's Starlink satellites into low-Earth orbit from a launch pad at Vandenberg Space Force Base in California. A mere 4 hours and 12 minutes later, another Falcon 9 rocket delivered two large communications satellites into geostationary transfer orbit for the Luxembourg-based satellite company SES from Cape Canaveral, Florida. This broke SpaceX's record for the shortest duration between two launches. However, the overall record for the lowest time between two launches of the same rocket still belongs to the Russian-built Soyuz vehicle. In June 2013, Roscosmos launched a Soyuz booster from Kazakhstan, and Arianespace launched a Soyuz from French Guiana within two hours. Those launches were conducted by two separate space agencies on separate continents, however. More may be found at https://bit.ly/42xueil. [ANS thanks Eric Berger of ARS Technica for the above information]

Join AMSAT today at https://launch.amsat.org/

In addition to regular membership, AMSAT offers membership to:

* Societies (a recognized group, clubs or organization).
* Primary and secondary school students are eligible for membership at one-half the standard yearly rate.
* Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status.
* Memberships are available for annual and lifetime terms.

Contact info [at] amsat.org for additional membership information.

73 and remember to help Keep Amateur Radio in Space!

This week's ANS Editor, Jack Spitznagel, KD4IZ
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